

CLAIMS

1. A conversion circuit component which mates to a base socket, comprising:
 - 5 a sealed unit body;
 - a sensor conversion and transmission circuitry enclosed by said body;
 - a display enclosed by said body ; and
 - a plurality of electrical contacts mounted on said body, including a first plurality of contacts for interaction with an external sensor and a second plurality of contacts for interaction with an external link.
- 10 2. A component according to claim 1, wherein said plurality of electrical contacts mate with a plurality of electrical pressure contacts located on said base socket.
3. A component according to claim 1, wherein said body forms together with said base socket a quick connector for quick electrical connection of said body to said socket.
- 15 4. A component according to claim 1, wherein said circuitry is designed to mount in an industry standard connection head.
5. A component according to claim 1, wherein said circuitry is designed to interface with an industry standard sensor.
- 20 6. A component according to claim 1, wherein said circuitry is designed to interface with an industry standard link.
7. The component according to claim 1 wherein the base socket is comprised of:
 - a body adapted to mount inside a standard connection head of an industrial sensing probe and be attached via standard connection means of said connection head;
 - 25 a plurality of terminals for attaching wires associated with said probe to said socket;
 - a plurality of contacts, each associated with one of said wires; and
 - a mechanical lock adapted to engage and align a circuitry component such that said contacts align with contacts of said circuitry.
8. A component according to claim 1, wherein said display is on a same side of said body as at least some of said contacts.
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9. A component according to claim 1, wherein said display is on an opposite side of said body from said contacts.
10. The component according to claim 1 further comprising a third plurality of contacts for interaction with an external programmer.

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